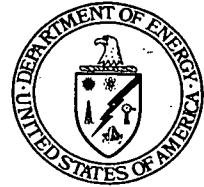




Department of Energy

Ohio Field Office Fernald Area Office

P. O. Box 538705
Cincinnati, Ohio 45253-8705
(513) 648-3155



2616

NOV 17 1999

Mr. James A. Saric, Remedial Project Manager
U.S. Environmental Protection Agency
Region V, SRF-5J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

DOE-0137-00

Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY
STUDY/CONSENT DECREE MONTHLY REPORT FOR THE PERIOD OF OCTOBER 1, 1999,
THROUGH OCTOBER 31, 1999**

This letter transmits the amended Consent Agreement Monthly Report for the period of October 1, 1999, through October 31, 1999. This report is formatted to reflect the proposal presented in the letter, DOE-0395-96, J. Reising to J.A. Saric and T. Schneider, "Phase VII Removal Actions and Reporting Requirements under the FEMP Legal Agreements," dated January 16, 1996, and agreed to by the U.S. Environmental Protection Agency (U.S. EPA) and Ohio Environmental Protection Agency (OEPA).

If you have any questions, please contact me at (513) 648-3139.

Sincerely,

Johnny W. Reising
Fernald Remedial Action
Project Manager

FEMP:Reising

Enclosure

Mr. James A. Satic
Mr. Tom Schneider

-2-

NOV 17 1999

=-2616

cc w/enclosures:

N. Hallein, EM-42/CLOV
G. Jablonowski, USEPA-V, SRF-5J
D. Sarno, FCAB
V. Dastillung, FRESH
P. Dunn, FRESH
F. Barker, Tetra Tech
D. Carr, FDF/52-2
T. Hagen, FDF/65-2
AR Coordinator, FDF/78

cc w/o enclosures:

A. Tanner, OH/FEMP
F. Bell, ATSDR
M. Schupe, HSI GeoTrans
J. Harmon, FDF/90
R. Heck, FDF/2
S. Hinnefeld, FDF/90
B. Irvine, FDF/28
T. Walsh, DFD/65-2
ECDC, FDF/52-7

000002

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY
STUDY/CONSENT DECREE MONTHLY REPORT OCTOBER 1 THROUGH OCTOBER 31, 1999**

- 2616

Introduction

This report describes actions at the Fernald Environmental Management Project (FEMP) from October 1, 1999 through October 31, 1999. The monthly report has been revised to reflect the proposal presented in the letter, DOE-0395-96, J. Reising to J.A. Saric and T. Schneider, "Phase VII Removal Actions and Reporting Requirements under the FEMP Legal Agreements", dated January 16, 1996, and agreed to by USEPA and OEPA.

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY
STUDY/CONSENT DECREE MONTHLY REPORT OCTOBER 1 THROUGH OCTOBER 31, 1999**

OPERABLE UNIT 1 - WASTE PITS REMEDIAL ACTION PROJECT

2616

October 1999

- Enforceable Milestones Expected to be Completed
 - None
- Major Work Initiated/Continued/Completed
 - Processed 9, 195 tons of material from waste pits, shipped 113 railcars of material for disposal at Envirocare of Utah.

November 1999 (Anticipated)

- Enforceable Milestones Expected to be Completed
 - None
- Major Work to be Initiated/Continued/Completed
 - Initiate and complete Standard Startup Review (SSR) for Dryer Operation
 - Declare readiness for Authorization of Full Operations
 - Process 17,200 tons of material from waste pits, ship 170 railcars of material for disposal at Envirocare

OPERABLE UNIT 2 - ON-SITE DISPOSAL FACILITY AND SOIL CHARACTERIZATION AND EXCAVATION PROJECT

Additional OU2 soils-related activities reported under OU5/Soils Characterization and Excavation Project

October 1999

- Enforceable Milestones
 - On-Site Disposal Facility (OSDF)
 - None
 - Soil Characterization and Excavation Project (SCEP)
 - None
- Major Work to be Initiated/Continued/Completed
 - On-Site Disposal Facility
 - Continue placement of impacted materials in Cells 1 and 2
 - Completed construction of primary and secondary geosynthetic liners in Cell 3
 - Began one foot protective cover in Cell 3

2616

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY
STUDY/CONSENT DECREE MONTHLY REPORT OCTOBER 1 THROUGH OCTOBER 31, 1999**

- Soil Characterization and Excavation Project (SCEP)
 - Area 1, Phase II
 - Incorporated preliminary as-builts into drawings for Site Preparation Package
 - Initiated testing of excavation dewatering pumps, completed seeding of disturbed areas in the STP Excavation and Trap Range Area
 - Developed A1PII Certification Design letter and project Specific Plan (PSP) for submittal to Agency
 - Area 2, Phase I
 - Received and commented on the draft summary report from the contractor showing stabilization results below toxicity characteristic levels in the Firing Range area
 - Completed excavation of SouthField Stockpile
 - Continued excavation of SouthField
 - Began excavation of bottom half of Active Flyash Pile
 - Area 2, Phase II
 - Received approval for Part One/Nonwaste Unit predesign
 - Began Realtime Scanning and handheld field demonstration of ground penetrating radar
 - Responded to Agency comments on "Predesign Project Specific Plan for A2PII Parts 2 and 3"; revised and resubmitted for approval
 - Area 2, Phase III
 - Continued data validation for Part One
 - Submitted Integrated Remedial Design Plan (IRDP) for Part Two
 - Other Areas
 - Conducted 100% design review on Area 3A/4A Title I/II Design Work
 - Continued work on the construction contract for the OSDF and Area 3A/4A excavation
 - Began sampling near K-65 Trench to support Lime Sludge Pond project
 - Conducted discussions with property owners in A9P1 area regarding access
- Real Time Program
 - Continued to establish QA/QC program for instrumentation
 - Continued construction of calibration pad for HPGe and NaI detectors
 - Continued development of methods and procedures for documenting the calibration pad process
 - Continued to determine need for revision of RTRAK applicability Study

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY
STUDY/CONSENT DECREE MONTHLY REPORT OCTOBER 1 THROUGH OCTOBER 31, 1999**

- Continue documenting calibration of a sodium iodide detection system placed on a John Deere Gator
- Calibrated RSSII (a sodium iodide detection system on a second stroller) data
- Natural Resource Restoration
 - Dept. of Interior and Ohio Attorney General's office continues to draft settlements
- Wetland Mitigation - Phase I
 - Project is ninety percent complete
- Conservation Area OU4 Supplemental Environmental Project
 - US Army Corp of Engineers made final offer to land owners regarding land easements, which was rejected; continue to determine a path forward in this area
- Ecological Research Projects
 - Subprojects consisting of
 - 1) Identification and Control of Invasive Species, continue to monitor growth of plants
 - 2) Monitoring of growth of A1PI and A8PI vegetation plots continues
 - 3) Ecological restoration case study by Texas Southern University is in progress, comments from FDF continue being compiled on Draft Final Report
 - 4) American Chestnut Trees, growth continues to be monitored at Miami University - Middletown Campus
- Final Land Use
 - Continued to draft Master Plan for Public Use

November 1999 (Anticipated)

- Enforceable Milestones
 - None
- Major Work to be Initiated/Continued/Completed
 - On-Site Disposal Facility
 - Continue placement of impacted materials in Cells 1 and 2
 - Begin two foot of select cover on Cell 3
 - Begin placement of categories one to five in Cell 3
 - Continue to await comments on "Evaluating Required Minimum Thickness of Intervening Horizon of Category I Impacted Report" from the Agencies
 - Soil Characterization and Excavation Project (SCEP)
 - Area 1, Phase II
 - Issue as-builts and close out Site Preparation Project

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY
STUDY/CONSENT DECREE MONTHLY REPORT OCTOBER 1 THROUGH OCTOBER 31, 1999**

- Begin immobilizing field sampling crews to begin certification sampling in STP Excavation and Trap Range areas
- Remove sediment from basin south of West Impacted materials Stockpile
- Remove ramp and 6 inches of stockpile footprint
- Begin STP and Trap Range as-builts
- Area 2, Phase I
 - Await Agency approval of sampling results regarding the Firing Range area
 - Begin excavation of treated soil for placement in the OSDF
 - Complete stockpile excavation and continue excavation in the SouthField
- Area 2, Phase II
 - Continue realtime sampling and begin physical sampling, within A2PII Part 1/Non-Waste Unit
 - Continue ground penetrating radar investigation
- Area 2, Phase III
 - Complete data validation and submit Certification Report for Part One
- Other Areas
 - Complete field activities for Area 3A/4A Subsurface Predesign Investigation
 - Conduct review of 60% Title I/II design
 - Review Silos 1, 2, and 3 preliminary designs to determine if additional Waste Acceptance Criteria is necessary
 - Continue discussions with property owners in A9P1 area regarding access (NOTE: Certification strategy for off-property areas has been incorporated into the "Final Sitewide Excavation Plan [SEP])
- Real Time Program
 - Draft methods for calibration of NaI and HPGe tools on the calibration pad
 - Initiate revision of "Guidelines, Measurement Strategies, and operation Factors for the Deployment of In-Situ Gamma Spectroscopy at the Fernald Site".
 - Submit documentation of Gator calibration to Agencies for concurrence
 - Initiate RSSII Report
- Natural Resource Restoration
 - Dept. of Interior and Ohio Attorney General's office continues to draft settlements
- Wetland Mitigation - Phase I
 - Issue addendum to design with as-built drawing
 - Complete Fall planting

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY
STUDY/CONSENT DECREE MONTHLY REPORT OCTOBER 1 THROUGH OCTOBER 31, 1999**

- Conservation Area OU4 Supplemental Environmental Project
 - Determine path forward
- Ecological Research Projects
 - Plant American Chestnut trees
 - Continue to monitor growth in A8PI vegetation plots
 - Continue review of report from Texas Southern University
- Final Land Use
 - Continue to draft Master Plan for Public Use

OPERABLE UNIT 3 - FACILITIES CLOSURE AND DEMOLITION PROJECT

October 1999

- Enforceable Milestones
 - None
- Major Work Initiate/Continued/Completed
 - Plant 5 D&D
 - Completed gross washdown and encapsulation in Buildings 55A, 55B, 5G, 5B and 5C
 - Completed demolition of Buildings 5C and 5G
 - Began demolition of Building 5B
 - Continue building preparation in Building 5A
 - Continue construction of scaffolding and asbestos containment within Building 5A
 - Miscellaneous Structures
 - Continued work in the General Sump area, taking down electric and steam, and 3 tanks were energy isolated

November 1999 (Anticipated)

- Enforceable Milestones
 - None
- Major Work to be Initiated/Continued/Completed
 - Plant 5 D&D
 - Complete transite removal and demolition of Buildings 55A and 55B
 - Complete demolition of Building 5B
 - Begin asbestos abatement within Building 5A
 - Begin gross washdown of Building 5A
 - Maintenance/Tank Farm D&D and Water Storage Tank Project
 - Complete field work
 - Other Structures
 - Begin taking the fire systems down for Buildings 20A and 64/65

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIATION INVESTIGATION/FEASIBILITY
STUDY/CONSENT DECREE MONTHLY REPORT OCTOBER 1 THROUGH OCTOBER 31, 1999**

OPERABLE UNIT 4 - SILOS PROJECT

October 1999

- Enforceable Milestones
 - None
- Major Work Initiated/Continued/Completed
 - Completed FDF internal review of 50% Safety Basis Document (PHAR) and portions of the Preliminary Design Package for Silo 3; transmitted comments to Rocky Mountain Remediation Services (RMRS) for incorporation
 - Received Critical Analysis Team (CAT) comments on the Silo 3 design
 - Completed CAT, DOE Independent Review Team (DIRT) and DOE-FEMP review of the draft Revised Feasibility Study for Silo 1 and 2
 - Finalized schedule for the Accelerated Waste Retrieval Project

November 1999 (Anticipated)

- Enforceable Milestones
 - None
- Major Work to be Initiated/Continued/Completed
 - Conduct over-the-shoulder review of Silo 3 Site Preparation Package and Design Basis Documents
 - Incorporate DOE, CAT, and DIRT comments on the draft Silos 1 and 2 Feasibility Study for the Citizens Advisory Board (CAB) Remediation Subcommittee, and for the full CAB
 - Begin review of the Preliminary Design Package and Preliminary Hazard Analysis Report (PHAR) for the AWR Project

OPERABLE UNIT 5 - AQUIFER RESTORATION AND WASTEWATER PROJECT

August 1999

- Enforceable Milestones
 - Submitted monthly NPDES Discharge Monitoring Report to the OEPA on October 13, 1999
 - Met 20 parts per billion (ppb) monthly average uranium discharge to Great Miami River as required by OU5 Record of Decision
- Work Initiated/Continued/Completed
 - Submitted the July 1999 Operating Report for the Re-injection Demonstration on October 20, 1999 to DOE for transmittal to the Agencies
 - Submitted responses to OEPA comments on the May 1999 Monthly operating Reports for the Re-Injection Demonstration on October 14, 1999

-261.6

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY
STUDY/CONSENT DECREE MONTHLY REPORT OCTOBER 1 THROUGH OCTOBER 31, 1999**

- Submitted FDF's path-forward on the permanent Leachate Transmission System (LTS) to DOE on October 13, 1999 for transmittal to the Agencies
- Submitted responses to the Second Round OEPA Comments on the Draft Technical Memorandum for the On-Site Disposal Facility Cell 1 Baseline Groundwater Conditions (September 1998) to DOE on October 7, 1999 for transmittal to the Agencies
- Issued Notice to Proceed on October 18, 1999 to Staver for the Two Additional Extraction Wells and Piping Project
- Completed drilling, installation and development of two extraction wells on October 29, 1999
- Prepared a Project Specific Plan to conduct pre-design geoprobing in the Waste Storage Area and the Plant 6 Area
- Began preparation for the Groundwater Remedy performance section of the IEMP Report, 3rd Quarter 1999

November 1999 (Anticipated)

- Enforceable Milestones
 - Submit monthly NPDES Discharge Monitoring Report to the OEPA covering the previous month
 - Meet 20 parts per billion (ppb) monthly average uranium discharge to Great Miami River as required by OU5 Record of Decision
- Work to be Initiated/Continued/Completed
 - Submit monthly 1999 Operating Report for the Re-injection Demonstration to DOE for transmittal to the Agencies
 - Complete construction of Multimedia Backwash Reroute Project (11/29)
 - Complete Conceptual Design of Warehouse/Garage for Vacuum Trucks
 - Continue compiling and evaluating data collected during the Re-injection Demonstration in preparation for the Re-Injection report
 - Conduct 30% informal review of Detail Design package of new Leachate Transmission System
 - Begin pre-design geoprobing in the Waste Storage Area
 - Complete preparation of the Groundwater Remedy Performance section of the IEMP Report for 3rd Quarter 1999

WASTE MANAGEMENT

October 1999

- Enforceable Milestones
 - None

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIAL INVESTIGATION/FEASIBILITY
STUDY/CONSENT DECREE MONTHLY REPORT OCTOBER 1 THROUGH OCTOBER 31, 1999**

- Work Initiated/Continued/Completed
 - Neutralization/Precipitation/Deactivation/Stabilization (NPDS) Project
 - The project is complete. Radiological calculations for shipment have been completed and shipment paperwork for NPDS thorium waste is being prepared
 - Thorium Legacy Waste Project (TLWP)
 - Total Low Level Waste boxes repackaged to date is 347 and total Mixed Waste boxes repackaged to date is 62
 - Completed the investigation into the Thorium metal fire that occurred on July 24, 1999. The final investigation report and the corrective action plan were issued on September 30, 1999
 - Initiated and continue supporting the implementation of the Corrective Action Plan for the Thorium metal fire and finalizing the Occurrence Report
 - Performed change outs and maintenance of several HEPA units due to moisture problems
 - Completed draft request for proposal for treatment of the Thorium metal inventory and initiated an independent government estimate
 - Assisting the Low Level Waste Project in the SSR to ship the Thorium LLW to Nevada Test Site (NTS)
 - RCI Solvent Extraction Project
 - Completed redline drawings clarifying activities for movement of remaining OEP equipment from Building 80
 - Waste Minimization
 - Incorporated comments of the Used Oil Recycling Statement of Work (SOW)
 - Submitted EM-70 Quarterly Waste Minimization report to DOE-Headquarters on October 28, 1999
 - Liquid Mixed Waste Project
 - Continue to evaluate newly generated waste streams for bulking
 - Awaiting sampling materials acquisition of the Batch 8-consolidation tank decontamination PCB sampling; Batch 7 decontamination will follow
 - Received approval of application for Batch 9 treatment from TSCA Incinerator; this was forwarded to the State of Tennessee for approval
 - Conducting final evaluation for possible AWWT treatment by Waste Characterization and AWWT representatives
 - Mixed Waste Shipping
 - Continued container review of containers of below-LDR mixed waste for shipment to Envirocare
 - Hazardous Waste Project
 - Finalized Safety-Kleen contract extension
 - Issue Heritage Environmental Services optional year contract extension
 - Organic Treatment Project
 - Continued draft Absorbent Determination covering the Organic Treatment Project First Article Test

**CONSOLIDATED CONSENT AGREEMENT/FEDERAL FACILITY COMPLIANCE
AGREEMENT/FEDERAL FACILITY AGREEMENT/REMEDIATION INVESTIGATION/FEASIBILITY
STUDY/CONSENT DECREE MONTHLY REPORT OCTOBER 1 THROUGH OCTOBER 31, 1999**

November 1999 (Anticipated)

- Enforceable Milestones
 - None
- Work to be Initiated/Continued/Completed
 - Mixed Waste Shipping
 - Continue container review of containers of below-LDR mixed waste for shipment to Envirocare
 - Liquid Mixed Waste Project
 - Initiate activities to decontaminate Batch 7 and Batch 8 consolidation tanks
 - Neutralization/Precipitation/Deactivation/Stabilization (NPDS) Project
 - Continue to prepare shipment paperwork for thorium waste
 - Ship excess cement drums
 - Thorium Legacy Waste Project
 - Conduct Real-Time Radioscopic Testing (RTR) of Thoria Gel for shipment
 - Complete occurrence report for the Thorium metal fire (i.e., Lessons learned, Corrective Actions, Root Cause, etc.)
 - Initiate implementation of the Thorium Fire Corrective Action Plan
 - RCI Solvent Extraction Project
 - Move remaining OEP equipment from Building 80 to storage area in Plant 2/3
 - Organic Treatment Project (OTP)
 - Finalize absorbent determination to develop container requirements
 - Initiate Technical Review Board data package
 - Hazardous Waste/Recycling
 - Prepare to ship Water Treatment Chemical off site
 - Begin preparing Vitrification Pilot Plan for excess chemicals
 - Continue to work toward on-site asbestos dumpster and asbestos disposal